

## Claims

What is claimed is:

1. An adaptor for dispensing a liquid into a container, the adaptor comprising:  
a sleeve having an outer surface and an inner surface;  
an opening passing through the outer surface and inner surface of the sleeve;  
a pipe having a first and a second end, the first end attached to the opening; and  
a sealing lid removably disposed over the second end of the pipe.
2. The adapter of claim 1, and further comprising a divider plate disposed in the pipe and passing between the first end and the second end of the pipe.
3. The adapter of claim 2, wherein the divider plate is attached along the length of the pipe to create a top and a bottom chamber in the pipe.
4. The adapter of claim 3, wherein the top and bottom chambers of the pipe are substantially similar in size.
5. The adapter of claim 1, wherein the inner surface of the sleeve forms a channel with a cross sectional area that is substantially the same as an opening in the container.
6. The adapter of claim 5, wherein the cross sectional area of the channel is substantially circular in shape.
7. The adapter of claim 1, wherein the sleeve comprises one of stainless steel and aluminum.
8. The adapter of claim 1, wherein the sleeve is cylindrical in shape.

9. The adapter of claim 1, wherein the sleeve is adapted to make a seal with a dewar flask.
10. The adapter of claim 5, where in the channel is adapted to receive a dewar head assembly.
11. A system for dispensing a liquid comprising:
  - a container;
  - an adapter for dispensing liquid into the container, the adapter comprising:
    - a sleeve having an outer surface and an inner surface;
    - an opening passing through the outer surface and the inner surface of the sleeve;
    - a pipe having a first end and a second end, the first end attached to the opening and the second end adapted to receive liquid into the container;
    - a sealing lid removably disposed over the second end of the pipe; and
    - an assembly for dispensing liquid from the container; and
  - wherein the adapter is in fluid communication with the container and the assembly.
12. The system of claim 11, wherein the container is a dewar flask.
13. The system of claim 11, wherein the adapter further comprising a divider plate disposed in the pipe and passing between the first end and the second end of the pipe.
14. The system of claim 13, wherein the divider plate is attached along the length of the pipe to create a top and a bottom chamber in the pipe.
15. The system of claim 14, wherein the top and bottom chambers of the pipe are substantially similar in size.
16. The system of claim 11, wherein the assembly is connected to an electrical interface and an output interface.

17. The system of claim 11, wherein the sleeve comprises one of stainless steel and aluminum.
18. The system of claim 11, wherein the sleeve is adapted to make a seal with a dewar flask.
19. The system of claim 11, wherein the inner surface of the sleeve forms an opening that is adapted to receive a dewar head assembly.
20. The system of claim 19, where in the sleeve has a second opening, opposite the first opening that is substantially the same size as the first opening of the container.
21. The system of claim 11, wherein a first end of the adapter is sealed to a dewar flask and a second end of the adapter is sealed to a dewar head assembly.
22. A method for dispensing a liquid into a container, the method comprising:  
securing an adapter to the container, the adapter having a sleeve with an outer surface and an inner surface defining a channel and a pipe in fluid communication with the channel;  
inserting a pipe of an assembly into the channel of the adapter and the container;  
securing the assembly to adapter;  
pouring the liquid into the container through the pipe of the adapter.
23. The method of claim 22, wherein securing the adapter to the container comprises forming an airtight seal between the adapter and the container.
24. The method of claim 22, wherein securing the assembly to the adapter comprises forming an airtight seal between the assembly and the adapter.
25. The method of claim 22, wherein the sealing lid is removed prior to pouring of the liquid into the container.

26. The method of claim 22, wherein air is vented from the container via a top chamber in the pipe of the adapter while pouring the liquid into the container through a bottom chamber of the pipe.

27. A method for dispensing liquid from a container, the method comprising:  
securing an adapter to the container, the adapter having a sleeve with an outer surface and an inner surface defining a channel and a pipe in fluid communication with the channel;

inserting a pipe of an assembly into the channel of the adapter and the container;  
securing the assembly to adapter;  
pouring a liquid into the container through the pipe of the adapter;  
dispensing the liquid through the assembly; and  
pouring additional liquid into the container through the pipe of the adapter without removing the assembly.

28. The method of claim 27, wherein the sealing lid is in place while dispensing the liquid through the assembly.